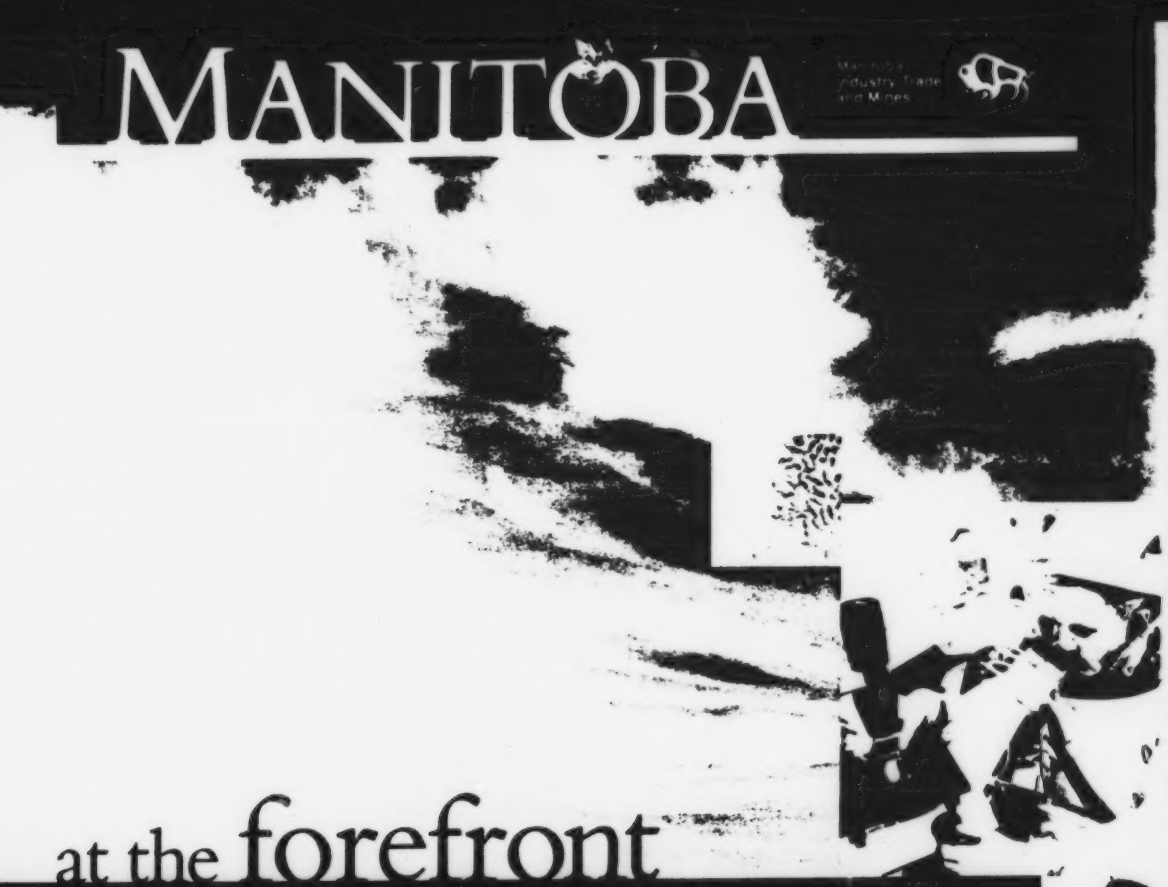
MANITOBA

Manitoba Industry, Trade and Mines



at the forefront

innovation

103-01065/

An Overview of Manitoba's life sciences expertise, infrastructure and research capabilities

Manitoba Life Sciences Industry Directory

Corporate and Research Institution Profiles

Manitoba
Industry, Trade
and Mines

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Our Location

Manitoba – a great place to do business

A mid-continent location, excellent transportation links and a highly diversified economy ensure Manitoba a consistently strong economic climate. Covering just over 650,000 square kilometres (250,000 square miles), this prairie province is home to over a million people.

Manitoba's capital city of Winnipeg is located in the geographical centre of North America with close proximity to the United States. Serviced by three continental railways and home to half the country's largest trucking firms and an international airport operating 24 hours a day, Winnipeg maintains its historic position as a major transportation hub. As well, the province's central time zone makes it easy for local businesses to communicate with contacts across the continent.

Manitoba also boasts an educated and highly-skilled labour force, a dependable infrastructure and low business costs. Not only is Manitoba an excellent place to do business – it also provides an exceptional quality of life, offering residents a rich variety of social, cultural and recreational benefits.

Proactive and supportive government

Manitoba's responsible and forward-thinking fiscal and regulatory environment promotes stability. Provincial government assistance programs for business plan development, feasibility studies, capital expansions and technology commercialization improve opportunities for biotechnology businesses locating here.

The Manitoba government promotes an environment that supports innovation by offering competitive marketplace policies, responsive tax programs, significant investment in R&D, and training to prepare Manitoba's workforce for a knowledge-based economy.

Mid-Continental Location

The Manitoba Advantage

An Attractive Life Sciences Environment

The biotechnology industry in Manitoba represents a dedicated pool of expertise in biomedical and agricultural research. Numerous players, including established corporations with a biotechnology division, universities, research institutes, government laboratories, venture capital firms, regulatory authorities and suppliers – involved directly or indirectly in biotechnology – have taken advantage of Manitoba's cost-effective research environment. All of this is underscored by a recent Conference Board of Canada Report that calls Manitoba's R&D tax program for biotech ventures "one of the most attractive in North America."

Global Excellence

Manitoba is home to a strategic cluster of biotechnology companies that form an efficient and synergistic chain of researchers, start-up companies, SMEs and large international corporations, all linked to a network of biotech suppliers. Manitoba is internationally recognized for technical expertise in:

- Proteomics
- Bioinformatics
- Biological mass spectrometry
- Gene expression analysis
- Marker-assisted selection of genes
- Population analysis
- Conventional and hybrid breeding
- Bacterial fermentation

Manitoba is also home to unique world-class research facilities:

- the Canadian Science Centre for Human and Animal Health - the first and only global centre with level-4 bio-containment capability for the study of both human and animal disease
- the National Research Council Institute for Biodiagnostics (IBD) - the most state-of-the-art facility in Canada for studying and developing NMR and MRI technologies
- Agriculture and Agri-Food Canada's Cereal Research Centre - the national headquarters for R&D within the areas of cereal genomics, pathology and biotechnology related to development of improved wheat and oat varieties
- the National Centre for Agri-Food Research in Medicine - a unique facility in Canada that examines the effects that nutraceuticals, functional foods and food components have on human health and well-being

Skills

Companies	Page No.	Other	Virology	Veterinary	Vaccines	Transformation	Toxicology	Therapeutics	Reagents	Proteomics	Product Development	Plant Breeding	Nutraceuticals	Infectious Diseases	Genomics	Gene Libraries	Food and nutrition	Financial/business services	Diagnostics	Contract R&D	Controlled environments	Consulting services	Biosafety testing	BioInformatics	Biocontainment – Level 3
Acsion Industries Inc.	13	•																							
ADE & Company	14	•																•				•			
Advanta Seeds	15	•				•					•	•													
Ag-Quest Inc.	16										•	•								•					
Agriprogress Inc.	17											•								•					
Atlas Laboratories Company Ltd.	19								•																
Brett-Young Seeds	23	•									•	•													
Conviron (Controlled Environments Ltd.)	27	•													•						•				
Dominion Veterinary Laboratories Ltd.	30	•		•																					
Enconair Ecological Chambers Inc.	31														•						•				
Genesys Venture Inc.	32																	•							
ICMS Inc.	37										•	•	•		•					•	•				
Kade Research Ltd.	39										•	•	•		•		•			•					
Kane Biotech Inc.	40							•			•			•											
Lombard Life Sciences	41													•				•							
Manitoba Hydro	42										•									•	•				
Monsanto Canada Inc.	45										•	•	•		•					•					
Nutratech Inc.	48				•			•			•		•	•	•		•					•		•	
TRLabs	53																	•						•	
University of Manitoba – University Industry Liaison Office	54																	•				•			

Skills

Research Institutions	Page No.	Other	Virology	Veterinary	Vaccines	Transformation	Toxicology	Therapeutics	Reagents	Proteomics	Product Development	Plant Breeding	Nutraceuticals	Infectious Diseases	Genomics	Gene Libraries	Food and nutrition	Financial/business services	Diagnostics	Contract R&D	Controlled environments	Consulting services	Biosafety testing	Bioinformatics	Biocontainment – Level 3
Bioremediation Group (Department of Microbiology) – U of M	60									•						•									
Brandon Research Centre - AAFC	61	•																							
Cereal Research Centre - AAFC	63		•				•			•		•			•	•	•								
Functional Foods and Nutraceutical Centre	66	•									•	•	•				•			•			•		
Lipid, Lipoprotein and Atherosclerosis Group – U of M	71												•				•								
Manitoba Centre for Bioinformatics - U of M	73																						•	•	•
Manitoba Centre for Proteomics - U of M	75								•	•													•	•	•
Manitoba Institute of Child Health	77	•					•				•		•				•			•			•	•	•
Morden Research Centre - AAFC	78	•										•					•								
National Centre for Agri-Food Research in Medicine	79							•			•		•	•			•		•	•		•	•		
University of Manitoba – Faculty of Agriculture and Food Science	83					•	•		•		•			•	•	•	•		•	•		•	•		
University of Manitoba - Research	84						•				•		•				•			•		•	•		

Skills

Companies	Page No.	Other	Vaccines	Therapeutics	Proteomics	Neurosciences	Infectious Diseases	High Throughput Screening	Gene Libraries	Financial/Business Services	Drug Discovery	Diagnostics	Contract Services	Contract R&D	Clinical Trials – Level 3	Clinical Trials – Level 2	Clinical Trials – Level 1	Biosafety Testing	Bioprocessing	Bioinformatics	Biocontainment – Level 4	Biocontainment – Level 3
Acsion Industries Inc.	13	•																				
ADE & Company	14	•																				
Apotex Fermentation Inc.	18			•										•					•			
Atlas Laboratories Company Ltd.	19																			•		
AutoLITT Inc.	20			•																		
Avalon Institute of Applied Science Inc.	21												•	•								
Biovail Corporation	22															•			•			
Cangene Corporation	24	•	•	•			•				•	•	•	•		•						
Cardiovascular Solutions Inc.	25			•							•											
Contrimmune Biotechnologies Inc.	26			•							•											
Conviron (Controlled Environments Ltd.)	27	•																				
Cronus BioPharma Inc.	28			•							•											
DiaMedica Inc.	29			•							•	•										
Genesys Venture Inc.	32									•			•									
Genomic Solutions Canada Inc.	33				•															•		
Health Care Products Association of Manitoba	34	•								•												
Health *Trials*	35									•			•									
Hill Top Research Inc.	36												•							•		
Innovative Magnetic Resonance Imaging Systems Inc.	38					•							•									
Kane Biotech Inc.	40			•			•						•									
Lombard Life Sciences	41									•												
Manitoba Hydro	42												•	•								
Medicure Inc.	43			•							•		•	•								
Momentum Health Information Systems	44	•											•									
nir-vivo inc.	46												•	•								
NovaDAQ Technologies Inc.	47													•								
Nuratech Inc.	48		•				•							•								
PharmEng Technology Inc.	50													•								
RW Packaging Ltd.	51	•												•								

Skills

Companies con't.	Page No.	Other	Virology	Vaccines	Transgenic Facilities	Therapeutics	Reagents	Proteomics	Product Development	Neurosciences	Infectious Diseases	High Throughput Screening	Genomics	Gene Libraries	Financial/Business Services	Drug Discovery	Diagnostics	Contract Services	Contract R&D	Clinical Trials – Level 3	Clinical Trials – Level 2	Clinical Trials – Level 1	Biosafety Testing	Bioprocessing	BioInformatics	Biocontainment – Level 4	Biocontainment – Level 3
SmartPark – U of M	52	•													•												
TRLabs	53														•				•						•		
University of Manitoba – University Industry Liaison Office	54														•			•									
Viventia Biotech Inc	55					•			•							•						•					

Research Institutions

Asthma/Chronic Obstructive Pulmonary Research Centre	59	•							•										•								
CancerCare Manitoba	62	•																									
Childhood Genetic Disease Centre	64					•							•												•		
Division of Neurovirology & Neurodegenerative Disorders	65							•			•		•						•						•		
Genomic Centre for Cancer Research and Diagnosis	67	•							•										•								
Health Sciences Centre Department of Research	68			•		•	•		•	•	•							•	•						•		
Institute for BioDiagnostics	69					•					•						•		•						•		
Institute of Cardiovascular Sciences	70					•	•												•								
Lipid, LipoProtein and Atherosclerosis Group - U of M	71								•																		
Mammalian Functional Genomics Centre	72				•								•	•											•		
Manitoba Centre for BioInformatics - U of M	73												•												•		
Manitoba Centre for Health Policy	74	•																•									
Manitoba Centre for Proteomics - U of M	75						•	•											•						•		
Manitoba Institute of Cell Biology	76			•			•	•	•										•						•		
Manitoba Institute of Child Health	77			•		•		•	•	•	•							•	•						•		
National Centre for Agri-Food Research in Medicine	79			•	•	•	•		•	•	•							•	•						•		
National Microbiology Laboratory	80			•														•	•						•		
Spinal Cord Research Centre - U of M	81									•																	
St. Boniface General Hospital Research Centre	82	•								•	•						•			•							
University of Manitoba - Research	84				•			•	•	•	•	•	•	•	•		•	•	•	•	•	•	•		•		

Companies	Consulting Services	Controlled Environments	Contract R&D	Fermentation	Product Development	Waste Treatment	Other:	Page No
ADE & Company	•							14
Aq Quest Inc	•		•				•	16
Avalon Institute of Applied Science Inc.	•		•	•	•	•	•	21
Cangene Corporation			•	•	•			24
Conviron (Controlled Environments Ltd.)		•						27
Enconair Ecological Chambers Inc.		•						31
ICMS Inc.			•					37
Kane Biotech Inc.					•			40
Manitoba Hydro	•				•	•		42
Osumo Enterprises Inc.						•	•	49

Research Institutions	Biomedication Group (Department of Microbiology)	U of M	Page No
University of Manitoba - Research	•	•	60
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Company Profiles

companies

research institutions

companies

research institutions

Public Contact: Terry Stepanik
Address: 1 ARA Mooradian Way, P.O. Box 429
Pinawa, Manitoba, Canada
R0E 1L0
Telephone: (204) 753-2255
Fax: (204) 753-8466
E-mail: acsion@acsion.com
Web site: http://www.acsion.com

Parent Company: Same

Company Founded: 1998

President: Chris Saunders

Biotechnical activities since: 1998

Nature of business activities:
- Sterilization
- Pathogen reduction

Core technologies and expertise:
- Electron accelerator technology
- Dosimetry
- Effects of radiation on materials

Specialized facilities/equipment:
- Electron accelerator
- Gamma facility
- Dosimetry

Certifications:
- FDA registered

Important patents/licenses:
- None pertaining to life sciences

Current strategic partnerships/alliances:
- None

Partnering/collaboration sought or offered:
- Seeking partnerships to establish contract service
- Sterilization facilities in Canada and in United States

Public Contact: Mike Williams
Address: 1700-360 Main Street, Winnipeg, Manitoba, Canada R3C 3Z3
Telephone: (204) 947-1429
Fax: (204) 942-5723
E-mail: info@adeco.com
Web site: http://www.adeco.com

Parent Company: Same

Company Founded: 1947

No. of Employees: 8 full-time

Biotechnical activities since: 1996

Nature of business activities:

- Search services including patent searches, patentability, infringement, validity, name searches, subject matter searches, patent watches, trade-mark searches, design searches, copyright searches, and assignment searches
- Preparation, filing and prosecution of: patents, National Phase Entry of PCT Applications, designs, trademarks, copyrights, and plant patents/plant breeders rights
- These services can be carried out in Canada, USA and all other countries where appropriate systems are in place
- Other legal services, including litigation, business agreements and financial arrangements are available through our affiliated firm Fillmore Riley

Specialized facilities/equipment: None

Certifications: Canadian and US registered patent agents

Public Contact: Dr. Greg Buzza
Address: Unit 3-75 Scurfield Boulevard
Winnipeg, Manitoba
Canada R3Y 1P6
Telephone: (204) 488-4064
Fax: (204) 488-4766
E-mail: info@advantacan.com
Web site: http://www.advantacan.com

Parent Company: Same

Company Founded: 1985

President: Bruce Howison

No. of Employees: 66 full-time

Nature of business activities: Breeds, produces and markets a wide range of canola hybrids and varieties

Public Contact: Paul Kneeshaw
Address: P.O. Box 144, Minto, Manitoba
Canada R0K 1M0
Telephone: (204) 776-2087
Fax: (204) 776-2250
E-mail: agquest@agquest.com
Web site: http://www.agquest.com

Parent Company: Ag-Quest Holdings Ltd

Company Founded: 1983

President: Dr. David Rourke

No. of Employees: 30 full-time

Branch Offices: Minto, Manitoba
Elm Creek, Manitoba
Saskatoon, Saskatchewan
Lacombe, Alberta
Lethbridge, Alberta

Biotechnical activities since: 1983

Nature of business activities:
- Contract agricultural research services

Core technologies and expertise:
- Research specializing in GLP environmental fate, efficacy, and plant variety trials

Specialized facilities/equipment:
- GLP facility
- Field research equipment

Certifications:
- GLP compliant facility, Standards Council of Canada

companies

research institutions

Public Contact: Dr. Ottmar Philipp
Address: 81 Conner Hill Drive,
Box 2499, Morden, Manitoba
Canada R6M 1C2
Telephone: (204) 331-3611
Fax: (204) 325-8052
E-mail: agriprogress@mts.net

Parent Company: Same

Company Founded: 1986

President: Dr. Ottmar Philipp

E-mail: agriprogess@mts.net

No. of Employees: 5 full-time

Biotechnical activities since: 1996

Nature of business activities:

- Agriculture and consulting, plant breeding, contract R&D, product development, seed multiplication and export

Core technologies and expertise:

- Confined GMO trials
- Parent seed productions
- Variety development and marketing

Specialized facilities/equipment:

- Agricultural full line of research equipment for field trials

Certifications:

- Recognized plant breeder by CSGA (Canadian Seed Growers Association)

Important patents/licenses:

- Numerous variety licenses

Current strategic partnerships/alliances:

- Norddeutsche, Pflanzenzucht, Hans-Georg Lembke KG, Hoheulieth, 24363 Holtsee (Germany)

Partnering/collaboration sought or offered:

- Offering collaborations and sought collaborations on special quality traits development in canola (Brassica nopusl.)

Public Contact: Jeff Hartry
Address: 50 Scurfield Blvd, Winnipeg, Manitoba, Canada R3Y 1G4
Telephone: (204) 989-6830
Fax: (204) 989-9160
E-mail: jhartry@apoferm.mb.ca
Web site: http://www.apoferm.mb.ca

Parent Company: Apotex Group

Company Founded: 1992

Manager: Sandy Fowler

E-mail: sfowler@apoferm.mb.ca

No. of Employees: 125 full-time

Biotechnical activities since: 1992

Nature of business activities:

- Research, development and production of active pharmaceutical ingredients under GMP

Core technologies and expertise:

- Fermentation based pharmaceuticals including strain improvement, media development, chemical extraction and purification

Specialized facilities/equipment:

- From bench to production scale in fermentation and chemical processing
- Process scale up, containment, and large scale chromotography facilities and equipment

Certifications:

- FOA and TPP approved products

Partnering/collaboration sought or offered:

- Fermentation based process development, scale up and production for smaller scale requirements, such as, clinical trials and limited market pharmaceuticals

Public Contact: Dr. Andy Hsu
Address: 757 Sargent Avenue
Winnipeg, Manitoba
Canada R3E 0B3
Telephone: (204) 775-2707
Fax: (204) 783-9664

Company Founded: 1977

President: Dr. Andy Hsu

No. of Employees: 10

Biotechnical activities since: 1977

Nature of business activities:

- Manufactures and supplies clinical diagnostic products within the province of Manitoba, producing very low cost reagents for local markets

Core technologies and expertise:

- Microbiology-based manufacturer of antibodies, culture media
- Bulk production of custom-designed antibodies using a range of animals, including sheep, horse, pig, and guinea pig
- Customized diagnostic reagents

Current strategic partnerships/alliances:

- Ingram & Bell
- Sarstedt – Germany
- Unipath – United Kingdom

Partnering/collaboration sought or offered:

- Offering expertise in customized antibodies and reagents
- Seeking marketing channels within Canada

Address: 300-140 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3B 3C5
Telephone: (204) 943-0066
Fax: (204) 943-4793
Web site: http://www.lombardlifesciences.com

President: John Hodgert

E-mail: jhodgert@lombardlifesciences.com

Biotechnical activities since: 1998

Nature of business activities:
- Medical device development

Core technologies and expertise:
- Laser induced thermal therapy

Specialized facilities/equipment:
- Interventional magnetic resonance imaging suite
- Surgical suite
- Nd: YAG laser
- Animal facility

Certifications:
- ISO 1345 being implemented

Important patents/licenses:
- Issued patent covering core technology
- Provisional patent covering laser probe

Current strategic partnerships/alliances:
- Lombard Life Sciences
- Western Life Sciences Venture Fund LP

Address: P.O. Box 60013
110-2025 Corydon Avenue
Winnipeg, Manitoba
Canada R3P 2G9
Telephone: (204) 489-4569
Fax: (204) 489-5782
Web site: http://www.avalon-institute.org

Parent Company: Same

Company Founded: 1999

President: Dr. Valentina Yanko-Hombach

E-mail: valyan@avalon-institute.org

Biotechnical activities since: 1999

Nature of business activities:

- Contractual research, consulting, and education (post-graduate and continuing education)

Core technologies and expertise:

- Almost all aspects of life science

Public Contact: Rob Harris
Address: 100 Lifesciences Parkway
P.O. Box 21390, Steinbach,
Manitoba, Canada R0A 2T3
Telephone: (204) 326-9000
Fax: (204) 326-9800
Web site: http://www.biovail.com

Parent Company: Biovail Corporation - Mississauga, Ontario

President: Eugene Melnyk

No. of Employees: 232 full-time

Branch Offices: Raleigh, North Carolina
Chantilly, Virginia
Carolina and Dorado, Puerto Rico
Sandyford, Ireland

Biotechnical activities since: 1991

Nature of business activities:

- Pharmaceutical products- tablets/capsules

Core technologies and expertise:

- Biovail Corporation is a fully integrated specialty pharmaceutical company engaged in the formulation, clinical testing, registration, manufacture, sale and promotion of pharmaceutical products utilizing advance drug delivery technologies for chronic drug therapies

Specialized facilities/equipment:

- Steinbach- extended release tablets/capsules
- Chantilly- flash dose
- Dorado- extended release and flash dose products

Certifications:

- FDA/TPD approved facilities

Current strategic partnerships/alliances:

- TEVA - United States of America
- Forest Laboratories - United States of America
- GSK (Glaxo SmithKline) - United States of America

companies

research institutions

Public Contact: Rene Mabon
Address: P.O.Box 99, St. Norbert P.S.
Winnipeg, Manitoba
Canada R3V 1L5
Telephone: (204) 261-7932
Fax: (204) 275-7333
Toll-free: 1-800-665-5015
E-mail: renem@byseeds.com
Web site: http://www.byseeds.com

Parent Company: Same

Company Founded: 1984

President: Lloyd Dyck

No. of Employees: 120 full-time

Branch Offices: Rycroft, Alberta
Red Deer, Alberta
Gilbert Plains, Manitoba

Biotechnical activities since: 1999

Nature of business activities:

- Seed sales and marketing

Core technologies and expertise:

- Forage
- Canola and native seed production and processing
- Testing
- Breeding and marketing
- Inoculant Distribution

Specialized facilities/equipment:

- Seed Quality Labs
- Growth Rooms
- Microbiology Lab

Certifications:

- Canadian Seed Institute

Current strategic partnerships/alliances:

- Other private seed companies

Partnering/collaborations sought or offered:

- Plant growth promoting Rhizobacteria

Public Contact: Mark Langstaff
Address: 104 Chancellor Matheson Road
Winnipeg, Manitoba
Canada R3T 5Y3
Telephone: (204) 275-4200
Fax: (204) 269-7003
Toll-free: 1-877-226-4363
E-mail: mlangsta@cangene.com
Web site: http://www.cangene.com

Parent Company: Same

Company Founded: 1984

President: Dr. John Langstaff

No. of Employees: 500 full-time

Branch Offices: Winnipeg, Manitoba
Mississauga, Ontario
Baltimore, Maryland

Nature of business activities:

- Hyperimmunes- specialty antibodies, development and manufacturer of biopharmaceuticals, contract manufacturing

Core technologies and expertise:

- Cangene is a technology-driven organization with a leadership position in manufacturing specialty plasma-based products (hyperimmunes)
- Cangene uses innovative technologies to manufacture its hyperimmunes- these processes are transferable to a variety of products developed through the recombinant technologies of the biotechnology industry
- Cangene is also a global leader in the development of generic versions of the original biotech products whose patents are expiring

Specialized facilities/equipment:

- Recently expanded its capabilities through its subsidiary, Chesapeake Biological Laboratories, Inc. in Baltimore, Maryland where they recently completed construction of a new state-of-the-art viral manufacturing facility

Certifications:

- CGMP, ISO 9001, FDA licensed, Canadian Therapeutic Products Programme Licensure, UK MCA, European and Japanese compliance

Important patents/licenses:

- CGMP, ISO 9001, FDA licensed, Canadian Therapeutic Products Programme Licensure, UK MCA, European and Japanese compliance

Current strategic partnerships/alliances:

- Research and development agreements with Apotex Inc.

Address: 300-140 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3B 3C5
Telephone: (204) 943-0066
Fax: (204) 943-4793
Web site: http://www.lombardlifesciences.com

President: Kevin McGarry

E-mail: kmcgarry@lomardlifesciences.com

No. of Employees: 12

Biotechnical activities since: 1998

Nature of business activities:
- Drug development

Core technologies and expertise:
- Anti-restenosis
- Anti-inflammation

Specialized facilities/equipment:
- Specialized laboratories at the St. Boniface General Hospital Research Centre, Winnipeg, Manitoba

Important patents/licenses:
- Multiple provisional patents for core technology
- Patent # 60/150, 696

Current strategic partnerships/alliances:
- Western Life Sciences
- Lombard Life Sciences
- St. Boniface General Hospital Research Centre

Address: 300-140 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3B 3C5
Telephone: (204) 943-0066
Fax: (204) 943-4793
Web site: http://www.lombardlifesciences.com

Parent Company: Same

President: Kevin McGarry

E-mail: kmcgarry@lomardlifesciences.com

Nature of business activities:

- Drug development

Core technologies and expertise:

- Anti-retroviral
- Anti-inflammatory
- Anti-cancer therapeutics

Specialized facilities/equipment:

- Specialized laboratories at the St. Boniface General Hospital Research Centre, Winnipeg, Manitoba

Important patents/licenses:

- Multiple provisional patents for core technology

Current strategic partnerships/alliances:

- Western Life Sciences Venture Fund LP
- Lombard Life Sciences

Public Contact: Bill Mukanik
Address: 590 Berry Street, Winnipeg, Manitoba, Canada R3H 0R9
Telephone: (204) 786-6451
Fax: (204) 786-7736
Toll-free: 1-800-363-6451
E-mail: sales@conviron.com
Web site: http://www.conviron.com

Parent Company: Same

Company Founded: 1964

President: Steven Kroft

No. of Employees: 130 full-time

Nature of business activities:

- Manufactures and installs controlled environment systems for the precise control of temperature, humidity, light and irrigation for research applications
- Manufactures plant growth chambers and rooms, plant production rooms, tissue culture rooms, incubators, germinators and dew rooms

Core technologies and expertise:

- Expertise in controlled environment has been applied in pharmaceutical, nutraceutical, entomology and other applications requiring precise environmental control

Specialized facilities/equipment:

- Ambient testing room
- 50 Hz generator
- Controls lab

Certifications:

- ISO9001

Current strategic partnerships/alliances:

- 70 international authorized distributors

Partnering/collaboration sought or offered:

- Additional distributors needed for international export

Public Contact: Lyle Merrell
Address: 5 Donald St.- Suite 200,
Winnipeg, Manitoba
Canada R3L 2T4
Telephone: (204) 477-1611
Fax: (204) 477-1643
E-mail: cronus@mts.net

Parent Company:	Same
President:	Lyle Merrell
E-mail:	cronus@mts.net
No. of Employees:	1 full-time
Biotechnical activities since:	December 2000
Nature of business activities:	• Bronchodilator development
Core technologies and expertise:	• Airway smooth muscle physiology
Partnering/collaboration sought or offered	• None at this time

[redacted] companies

[redacted] research institutions

Public Contact: Dawson Reimer
Address: 6-1200 Waverley Street, Winnipeg, Manitoba, Canada R3T 0P4
Telephone: (204) 487-2328
Fax: (204) 488-9823
E-mail: info@diamedica.com
Web site: http://www.diamedica.com

Parent Company: Same

Company Founded: 2000

President: Dr. Wayne Lautt

No. of Employees: 6 full-time

Biotechnical activities since: 2000

Nature of business activities:

- Drug discovery and development company
- Focus on novel therapeutics that stimulate the release of Hepatic Insulin-Sensitizing Substance (HISS) for Type 2 diabetics

Core technologies and expertise:

- To develop new therapeutic agents to treat and diagnose diabetes based on the existence of HISS
- Dr. Wayne Lautt is the principle inventor of the diabetes technology and directs the current ongoing research
- Dallas Legare is Chief Operations Officer with 22 years research experience
- Dr. Mark d'Almeida is Lead Scientist and has international research experience
- Dr. Albert Friesen, CEO and Co-Founder, is an experienced bio-entrepreneur and has helped found several health industry companies including Rh Pharmaceuticals (now Cangene Corporation), ABI Biotechnology (acquired by Apotex Inc.), Novopharm Biotech Inc., Genesys Pharma Inc., KAM Scientific Inc., and Medicure Inc.
- Dawson Reimer, MAES, has been involved in DiaMedica since its inception and has experience facilitating the development of new biotechnology ventures

Specialized facilities/equipment:

- Research conducted within a designated area at the Chown Building at the University of Manitoba Health Sciences Centre

Important patents/licenses:

- DiaMedica currently has one U.S. patent
- Four patents pending relating to therapeutic approaches to Type 2 diabetes

Current strategic partnerships/alliances:

- Research agreement with a major pharmaceutical partner

Partnering/collaboration sought or offered:

- Alliances with major pharmaceutical companies for development and/or screening of potential Type 2 diabetes therapeutics and diagnostics

Public Contact: Shane Earn
Address: 800 Main Street,
RPO Redwood Centre, Winnipeg,
Manitoba, Canada R2W 3N7
Telephone: (204) 589-7361
Fax: (204) 943-9612
Toll-free: 1-800-465-7122
E-mail: david@domvet.com
Web site: http://www.domvet.com

Parent Company: Same

Company Founded: Early 1950's

President: Sheldon Earn

No. of Employees: 35 full-time

Branch Offices: Ontario
Saskatchewan
Alberta

Nature of business activities:
- Manufacturing veterinary pharmaceuticals including contract manufacturing

Core technologies and expertise:
- Same as above

Specialized facilities/equipment:
- Equipment and rooms to manufacture boluses, tablets, ointments, powders, and liquids

Certifications:
- Laboratory is accredited by the Government of Canada

companies

research institutions

Public Contact: Bill Porter
Address: 477 Jarvis Street, Winnipeg, Manitoba, Canada R2W 3A8
Telephone: (204) 589-8900
Fax: (204) 582-1024
Toll-free: 1-800-361-7778
E-mail: info@enconair.com
Web site: http://www.enconair.com

Parent Company: Same

Company Founded: 1992

President: Robert Pauls

E-mail: rpauls@enconair.com

No. of Employees: 15 full-time

Nature of business activities:

- Manufacture and design plant growth chambers, tissue culture chambers, incubators, seed germinators, environment rooms and related products

Core technologies and expertise:

- Engineer products to control temperature, humidity, lighting and carbon dioxide

Specialized facilities/equipment:

- Lab equipment for plant research

Public Contact: Dawson Reimer
Address: 4-1200 Waverley Street
Winnipeg, Manitoba
Canada R3T 0P4
Telephone: (204) 487-2328
Fax: (204) 488-9823
E-mail: info@genesysventure.com
Web site: http://www.genesysventure.com

Parent Company: Crocus Investment Fund, Manitoba Science and Technology Fund, AD Friesen Holdings LTD

Company Founded: 1998

President: Dr. Albert Friesen

E-mail: afriesen@genesysventure.com

No. of Employees: 7 full-time

Biotechnical activities since: 1998

Nature of business activities:

- Business incubator that provides experienced biotech management, market and technical expertise, and access to early stage capital to emerging health and biotechnology ventures
- Consultant to industry and public organizations on issues related to health technology and bio-industry development

Core technologies and expertise:

- Provide business development expertise to emerging health and biotechnology ventures
- Albert D. Friesen, President and CEO, holds a Ph. D. in Protein Chemistry and has been instrumental in founding several health industry companies. His efforts have lead to the establishment of several cGMP production facilities and initiation of numerous pharmaceutical candidates
- Dawson Reimer, Director of Business Development, lead in numerous biotechnology ventures by developing business plans, obtaining financing, and developing intellectual property protection
- Marcus Enns, Director of Corporate Affairs, oversees treasury activities and plays a major role in the funding process for GVI clients

Current strategic partnerships/alliances:

- Co-owned by the Manitoba Science and Technology Fund, a venture capital fund dedicated to growth of the sector within Manitoba and the Crocus Investment Fund, a Manitoba labour sponsored investment fund with nearly $200 million in assets under administration and more than 30,000 Manitoba shareholders
- Also benefit from a strong relationship with the University of Manitoba and all three levels of government
- Clients: Medicure, Diamedica, Kane Biotech, and Miraculins

Partnering/collaboration sought or offered:

- GVI is open to explore new partnership and venture creation opportunities presented by investors or by aspiring technology ventures

[redacted] companies

[redacted] research institutions

Address: 460 – 70 Arthur Street
Winnipeg, Manitoba
Canada R3B 1G7
Telephone: (204) 947-6706
Fax: (204) 947-6716
Toll-free: 1-877-947-6706
Web site: http://www.genomicsolutions.com

Parent Company: Same

Company Founded: 1999

Vice President: Dr. Ronald Beavis

E-mail: rbeavis@genomicsolutions.com

No. of Employees: 9 full-time

Biotechnical activities since: 1999

Nature of business activities:

- Bioinformatics software development
- Sales and service

Core technologies and expertise:

- Large scale database construction
- High performance computing
- Proteomics and genomics

Specialized facilities/equipment:

- General purpose software development environment
- Access to mass spectrometers at the University of Manitoba

Certifications:

- Oracle partner

Important patents/licenses:

- Patents involving the use of experimental data in genomics and proteomics

Current strategic partnerships or alliances:

- Computer vendor for pre-packaged informatics equipment
- Life sciences database vendor for value-added partnering

Public Contact: Marguerite Laramee
Address: 464-435 Ellice Avenue, Winnipeg, Manitoba, Canada R3B 1Y6
Telephone: (204) 942-3829
Fax: (204)942-3833
E-mail: infor@hcpam.com
Web site: http://www.hcpam.com

Parent Company: Same

Company Founded: 1990

No. of Employees: 2 full-time

Biotechnical activities since: 1999

Nature of business activities:

- An incorporated, non-profit association representing manufacturers of pharmaceuticals and medical devices in the Province of Manitoba
- Co-ordinates training, information and networking opportunities for its members
- Assists members with the delivery of programs which foster increased market access and the attainment of relevant international quality standards

Current strategic partnerships/alliances:

- The Province of Manitoba – Industry, Trade and Mines
- The Government of Canada – IRAP/NRC
- Industry Canada
- Agriculture and Agri-Food Canada
- Manitoba Environmental Industries Association
- Manitoba Food Processors Association

Public Contact: Lesley Stewart
Address: MS744 – 320 Sherbrook Street
Winnipeg, Manitoba
Canada R3A 1R9
Telephone: (204) 787-2084
Fax: (204) 787-4547

Nature of business activities:

- Preparation and submission of protocols, amendments and consent forms to Ethics Committees
- Matching pharmaceutical companies with investigators for clinical trials
- Facilitating (within the Manitoba Clinical Research Initiative shared mandate) opportunities for training in the fundamentals for Good Clinical Practice (GCP)
- Assisting with budget preparation and projections prior to a clinical trial
- Assisting in the review of clinical trial agreements
- Special research-related project coordination

Core technologies and expertise:

- The Health *Trials* Research Coordinator Database assists investigators to find qualified Clinical Research Coordinators

Public Contact: Wendy Lazer
Address: 236 Osborne Street- Suite A
Winnipeg, Manitoba
Canada R3L 2W2
Telephone: (204) 453-1835
Fax: (204) 475-4029
E-mail: wlazer@hill-top.com
Web site: http://www.hill-top.com

Parent Company: Same

Company Founded: 1988

No. of Employees: 50 full-time in Canada

Branch Offices: Arizona, USA
Ohio, USA
New Jersey, USA
Florida, USA
United Kingdom (3)

Biotechnical activities since: 1990

Nature of business activities:
- Clinical research

Core technologies and expertise:
- Safety and efficacy testing, pharmaceutical testing

Specialized facilities/equipment:
- Measurements for skin (instrumentation) and other therapeutic areas of investigators

Certifications:
- Physicians on staff

Partnering/collaboration sought or offered:
- Pharmaceutical companies

Public Contact: Luanne Anderson
Address: P.O. Box 67 Portage la Prairie, Manitoba, Canada R1N 3B2
Telephone: (204) 857-6609
Fax: (204) 239-4478
E-mail: anderson@icms-inc.com
Web site: http://www.icms.inc.com

Parent Company: Same

Company Founded: 1985

President: Brent Wright

E-mail: wright@icms-inc.com

No. of Employees: 16 full-time
15-20 seasonal

Branch Offices: Portage la Prairie, Manitoba, Saskatoon, Saskatchewan, Leduc, Alberta, Abbotsford, British Columbia

Biotechnical activities since: 1990

Nature of business activities:

- Field and controlled environment evaluation of plant and plant input material (including inoculants, biostimulants, and biopesticides)
- Confined release field studies evaluating Plants with Novel Traits (GMO's) according to Canadian Food Inspection Agency (CFIA) guidelines
- Post season monitoring of confined release field sites
- Project management and consulting
- Scientific and technology transfer presentations

Core technologies and expertise:

- Extensive experience with Standard Operating Procedures governing study conduct, Substance Control logs, and in-field monitoring programs
- In-house Quality Assurance Officer, qualified professional Agronomists with extensive field and educational experience in the conduct of crop (field, horticultural, and greenhouse) and soil evaluations

Specialized facilities/equipment:

- Network of regional field facilities across Canada with confined seed storage
- Precision equipment for weighing, application of seed treatment/inoculation, planting and harvesting

Certifications:

- Standards Council of Canada recognized facility for the conduct of OECD GLP compliant studies

Current strategic partnerships/alliances:

- Projects are conducted on a contractual basis, most often involving non-disclosure agreements. ICMS does not take a royalty or ownership position in the technology being evaluated

Partnering/collaboration sought or offered:

- Projects to be conducted on a contractual basis

Public Contact: Brian Keown
Address: 435 Ellice Ave, Winnipeg, Manitoba
Canada R3B 1Y6
Telephone: (204) 983-8887
Fax: (204) 984-1850
Toll-free: 1-888-304-0114
E-mail: john_saudners@imris.com
Web site: http://www.imris.com

Parent Company: Same

Company Founded: 1997

No. of Employees: 15 full-time

Biotechnical activities since: 1997

Nature of business activities:

- Medical device company
- Intra-operative MRI systems for use as an adjunct to neurosurgeons performing brain and spine surgeries
- Build very high field stationary MRI systems for scientific research

Core technologies and expertise:

- MR technology for designing and building MRI equipment
- Neurosurgical OR table design and build
- RF shielding expertise

Specialized facilities/equipment:

- Demo system in use at the Foothills Hospital, Seaman Family MR Research Centre in Calgary, Alberta
- Development test bed in Winnipeg, Manitoba
- Two sites using VHF systems and another contract to supply a third system in Canada

Certifications:

- ISO 9001, ISO 13485, EN 46001, CE Mark, FDA, and TPD approvals

Important patents/licenses:

- Exclusive licensee to our technology, which is protected by a Government of Canada owned patent filed in Canada, USA & European Union

Current strategic partnerships/alliances:

- Philips, Magnex Scientific, Oxford Magnet Technology, Brain LAB

Partnering/collaboration sought or offered:

- Partner/collaborate with local neurosurgeon at Health Sciences Centre, Winnipeg to develop a 'mini' version of the IMRIS moveable MRI systems

Public Contact: Clayton Campbell
Address: Unit 100-101 Route 100
Morden, Manitoba
Canada R6M 1Y5
Telephone: (204) 822-7235
Fax: (204) 822-5960
E-mail: kaderes@mb.sympatico.ca
Web site: http://www.kaderesearch.com

Parent Company: Same

Company Founded: 1995

President: Dr. Clayton Campbell

E-mail: campbell@mb.sympatico.ca

No. of Employees: 9 full-time

Biotechnical activities since: 1995

Nature of business activities:
- Plant breeding, contract R & D

Core technologies and expertise:
- Genomics, food and nutrition, nutraceuticals

Specialized facilities/equipment:
- PCR, tissue culture

Important patents/licenses:
- Variety license, Koban and Koto buckwheat

Current strategic partnerships/alliances:
- University of Manitoba, Japan Buckwheat Millers Association, Grain Research Laboratory

Public Contact: Marcus Enns
Address: 6-1200 Waverley Street,
Winnipeg, Manitoba,
Canada R3T 0P4
Telephone: (204) 487-2328
Fax: (204) 488-9823
E-mail: menns@gensysventure.com

Parent Company: Same

Company Founded: 2001

President: Dr. Albert Friesen

E-mail: albertfriesen@compuserve.com

No. of Employees: 1 full-time

Biotechnical activities since: 2001

Nature of business activities:

- Molecular mechanisms of biofilm formation
- Methods to find compounds that disrupt biofilms

Core technologies and expertise:

- Research on genes that regulate biofilm formation to identify drugs that promote biofilm formation or dispersal
- Dr. Tony Romeo, Chief Scientific Advisor and inventor, is a world-renowned expert in biofilm microbiology and global regulator gene technology
- Dr. Albert Friesen, President, is a successful entrepreneur who has started and managed several biopharmaceutical and biotechnology companies in North America
- Dr. Sri Madhyastha, Research Manager, has more than 20 years of research, teaching and management experience

Specialized facilities/equipment:

- Gene technology research based out of the University of North Texas Health Sciences Centre (UNTHSC)

Certifications:

- Important patents/licenses
- One U.S. provisional patent filed with a formal application to be filled within one year
- Exclusive license from UNTHSC to manufacture, use, license, sell, market, and promote any products resulting from the intellectual property

Partnering/collaboration sought or offered:

- Kane Biotech will license its products to biotechnology, biopharmaceutical and chemical companies for manufacturing, distribution and/or marketing

companies

research institutions

Public Contact: Don Back
Address: 300-140 Bannatyne Avenue
Winnipeg, Manitoba
Canada R3B 3C5
Telephone: (204) 943-0066
Fax: (204) 943-4793
E-mail: dback@lomardlifesciences.com
Web site: http://www.lombardlifesciences.com

President: Kevin McGarry
E-mail: kmcgarry@lomardlifesciences.com
No. of Employees: 11 full-time
Branch Offices: Saskatoon, Saskatchewan
Biotechnical activities since: 1998
Nature of business activities:
- Venture Capital

Current strategic partnerships/alliances:
- Manager of the Western Life Sciences Venture Fund LP

Public Contact: Paul Chard
Address: P.O. Box 815, 3rd Floor,
1565 Wilson Place, Winnipeg,
Manitoba, Canada R3B 1Y6
Telephone: (204) 947-4100
Fax: (204) 478-5191
E-mail: publicaffairs@hydro.mb.ca
Web site: http://www.hydro.mb.ca

Company Founded: 1951

No. of Employees: 4500 full-time

Biotechnical activities since: 1999

Nature of business activities:

- Electric power generation, transmission and distribution
- Natural gas transmission and distribution
- Related energy services

Core technologies and expertise:

- Manitoba Hydro offers technical expertise in the biotech areas of: agri-food industries; industrial processes; environmental issues

Specialized facilities/equipment:

- Advanced lighting technologies for plant production
- Advanced drying technologies for product processing
- Advanced uninteruptible power supply and power quality technologies

Public Contact: Dawson Reimer
Address: 4-1200 Waverley Street, Winnipeg, Manitoba, Canada R3T 0P4
Telephone: (204) 487-7412
Fax: (204) 488-9823
Toll-free: 1-888-435-2220
E-mail: info@medicureinc.com
Web site: http://www.medicureinc.com

Company Founded: 1997

President: Dr. Albert Friesen

E-mail: afriesen@genesysventure.com

No. of Employees: 19 full-time

Biotechnical activities since: 1998

Nature of business activities:

- Development of cardiovascular therapeutics
- Currently in Phase II for its lead product MC-1 (improves the heart's condition after serious injury by ischemia and ischemic reperfusion injury)

Core technologies and expertise:

- Develop treatments for unmet cardiovascular needs
- Albert D. Friesen, President and CEO, holds a Ph. D. in Protein Chemistry and has been instrumental in founding several health industry companies. His efforts have lead to the establishment of several cGMP production facilities and initiation of numerous pharmaceutical candidates
- Dr. Naranjan S. Dhalla, Co-founder and Chief Scientific Officer, is the principal inventor of Medicure's lead technology
- Dr. Karl-Gummar Hidinger, Vice-President/Clinical Development, is responsible for the design and management of clinical studies with Medicure's lead component, MC-1, and for the clinical aspects of other business development and research projects. His drug development experience spans 30 years and includes basic pharmacology research and preclinical research through clinical Phase I, II, III and market approval of new chemical entities

Specialized facilities/equipment:

- Current phase II clinical trials are managed by the Duke Clinical Research Institute (DCRI), Durham, North Carolina. DCRI is a recognized leader in cardiovascular clinical trials, clinical drug research and the evaluation of novel therapeutics under the direction of Principal Investigator, Dr. James E. Tcheng MD, F.A.C.C.

Important patents/licenses:

- Three issues US patents
- One US patent allowed for uses of MC-1 and various compositions
- Four pending applications

Partnering/collaboration sought or offered:

- Medicure is positioning itself as a provider of new small molecule drug candidates for large pharmaceutical companies focused on the cardiovascular market

Public Contact:	Gord Blaine
Address:	308-131 Provencher Blvd. Winnipeg, Manitoba Canada R2H 0G2
Telephone:	(204) 231-3836
E-mail:	info@momentumhealthware.com
Web site:	http://www.momentumhealthware.com

Company Founded:	1995
President:	Chuck LaFleche
E-mail:	chuck.lafleche@momentumhealthware.com
No. of Employees:	75
Nature of business activities:	• Provision of software and services to the healthcare industry
Core technologies and expertise:	• Financial Systems • Dietary Management Systems • MDS Assessment Systems • Long Term Care Clinical Systems • Acute Care Management Systems
Important patents/licenses:	• interRAI
Current strategic partnerships/alliances:	• Sysco Inc. (largest food supplier in the USA) – exclusive marketing agreement for our Dietary Management System • Virtual Care Provider (Milwaukee, Wisconson) – provider of hosting services to USA Long Term Care market
Partnering/collaboration sought or offered:	• Further managed operating/hosted sites • USA healthcare billing partners

companies

research institutions

Address: 67 Scurfield Blvd.
Winnipeg, Manitoba
Canada R3Y 1G4
Telephone: (204) 985-1000
Fax: (204) 488-9599
Web site: http://www.monsanto.com

Parent Company: Same

Company Founded: 1984

Director: Dr. LeeAnne Murphy

E-mail: lee.ann.murphy@monsanto.com

No. of Employees: 300 full-time

Nature of business activities:
- Agricultural technology

Core technologies and expertise:
- Crop protection chemistry
- Seed and biotechnology traits

Specialized facilities/equipment:
- Crop Technology Centre
- Lab
- Greenhouses

Partnering/collaboration sought or offered:
- Yes

Public Contact: Fred Doern
Address: 435 Ellice Avenue, Winnipeg, Manitoba, Canada R3B 1Y6
Telephone: (204) 953-8700
Fax: (204) 953-6702
E-mail: info@nir-vivo.com

Parent Company:	Same
Company Founded:	1999
President:	Fred Doern
E-mail:	doern@nir-vivo.com
No. of Employees:	6 full-time
Biotechnical activities since:	1999
Nature of business activities:	• Medical devices- infrared
Core technologies and expertise:	• Product development, prototyping, contract R&D
Current strategic partnerships/alliances:	• National Research Council of Canada • Inno-Centre
Partnering/collaboration sought or offered:	• Optical spectroscopy for medical diagnostics

companies

research institutions

Public Contact: Joel Palmer
Address: 435 Ellice Avenue,
Winnipeg, Manitoba,
Canada R3B 1Y6
Telephone: (204) 943-1724
Fax: (204) 942-3687
Web site: http://www.novadaqtech.com

Parent Company: Same

Company Founded: 2000

Director: Dr. John Docherty

E-mail: Jdocherty@novadaq.ca

No. of Employees: 13 full-time

Branch Offices: Winnipeg, Manitoba
Toronto, Ontario

Biotechnical activities since: 2000

Nature of business activities:

- Vascular imaging device for use during cardiac surgeries (with potential for use in other related areas)
- Device for the diagnosis and treatment of age related Macular degeneration (AMD)

Core technologies and expertise:

- Device development
- Optical physics

Specialized facilities/equipment:

- Certifications: ISO 9001, EN 46001, ISO 13485

Important patents/licenses:

- License from National Research Council of Canada for vascular imaging device
- License from John Hopkins University (Baltimore, Maryland) for device for diagnosis and treatment of AMD

Current strategic partnerships/alliances:

- National Research Council Canada
- John Hopkins University, Baltimore, Maryland
- ATS Automation Tooling Systems, Cambridge, Ontario

Public Contact: John Hare
Address: 6-62 Scurfield Blvd.
Winnipeg, Manitoba,
Canada R3Y 1M5
Telephone: (204) 487-0974
Fax: (204) 488-0051
E-mail: info@nutratechglobal.com

Parent Company: Same

Company Founded: 1999

President: John Mottola

E-mail: jmottola@nutratechglobal.com

No. of Employees: 9 full-time

Biotechnical activities since: 1999

Nature of business activities:

- Nutratech has developed a series of Antibody products that provide an effective, inexpensive treatment for enteric disease in animals
- The second product group includes several Salmonella strains, which will prove important to clinicians, microbiologists, those in the food industry and those responsible for the control of communicable disease
- The third product group will be developed to prevent disease caused by EHEC, including E.coli O157:H7
- Intend to pursue the development of additional products resulting from its programs in target discovery and product design for passive antibody products

Core technologies and expertise:

- Nutratech identifies and evaluates targets by using molecular genetics, protein biochemistry and animal disease models and designs product candidates to react with these targets that interfere with the disease process

Specialized facilities/equipment:

- Confidential

Certifications:

- Confidential

Important patents/licenses:

- Confidential

Current strategic partnerships/alliances:

- Distribution alliances have been developed in the European Union for the marketing of the products for the animal health market

Partnering/collaboration sought or offered:

- Nutratech is developing and seeking similar relationships in other global markets, including such markets as South America and Asia

companies

research institutions

Address: Suite 301
162 -2025 Corydon Avenue
Winnipeg, Manitoba
Canada R3P 0N5
Telephone: (204) 488-1538
Fax: (204) 488-1566
E-mail: postmaster@osorno-corp.com
Web site: http://www.osorno-corp.com

Parent Company: Same

Company Founded: 2000

President: H. Peter Hombach

Biotechnical activities since: 2000

Nature of business activities:

- All types of bio-environmental systems and services

Core technologies and expertise:

- Wastewater treatment (municipal, industrial, high-strength)
- Biofilter
- Composting automation

Partnering/collaboration sought or offered:

- Distributors wanted in Latin America

Address: 4-703 Corydon Avenue
Winnipeg, Manitoba
Canada
R3M 0W4
Telephone: (204) 927-1250
Fax: (204) 452-2422
Web site: http://www.pharmeng.com

Parent Company: PharmEng Technology Inc. – Markham, Ontario

Company Founded: 2000

Director: Ben Lee

No. of Employees: 10 full-time

Branch Offices: USA
China

Nature of business activities:

- Pharmaceutical and biotechnology consulting

Core technologies and expertise:

- Validation
- Regulatory compliance
- Training
- Engineering
- Commissioning

Specialized facilities/equipment:

- Calibrated instrumentation

Public Contact: Diane Solvason
Address: 200 Omand's Creek Blvd.
Winnipeg, Manitoba
Canada R2R 1V7
Telephone: (204) 786-6873
Fax: (204) 786-1927
Toll-free: 1-800-284-6338
E-mail: rwp@rwpackaging.com
Web site: http://www.rwpackaging.com

Parent Company: Same

Company Founded: 1919

No. of Employees: 67 full-time

Nature of business activities:

- Contract manufacturer of over the counter drug products (wets & drys), liquids and powders
- Range of products includes peroxide, alcohol (iso & ether), epsom salts, gripewater, mineral oil, distilled water, etc.

Certifications: GMP, ISO 9001

Public Contact: May Li
Address: 631 Drake Centre –
181 Freedman Crescent, Winnipeg,
Manitoba, Canada R3T 5V4
Telephone: (204) 474-6200
Fax: (204) 261-3475
E-mail: uilo@umanitoba.ca
Web site: http://www.uilo.com/smartpark

Parent Company: University of Manitoba
President: Alan Simms
E-mail: alan_simms@umanitoba.ca
No. of Employees: 10

Nature of business activities:

- Research and technology park designed to promote research and development collaboration between the University of Manitoba and industry
- Smartpark will enrich the University's research and education programs, provide employment opportunities for students, improve the University's ability to attract and retain highly qualified personnel, and highlight the University's role in fostering economic development and innovation

Core technologies and expertise:

- Specialized skills in the areas of advanced materials and manufacturing, agricultural and pharmaceutical biotechnology, information and telecommunications, and resource-based value added products and processing
- Expertise will assist Manitoba in growing, attracting and retaining knowledge-based companies
- Proximity to the University of Manitoba allows for fast access to our research expertise, facilities and equipment, as well as, our highly skilled students

Specialized facilities/equipment:

- Three buildings will be constructed this year, as part of Phase One - a multi-tenant facility, a pharmaceutical company expansion, and a functional foods and nutraceuticals research facility

Public Contact: Jose Rueda
Address: 10, 75 Scurfield Blvd., Winnipeg, Manitoba, Canada R3Y 1P6
Telephone: (204) 489-6060
Fax: (204) 488-1564
E-mail: info@trlabs.ca
Web site: http://www.trlabs.ca

Parent Company: TRLabs – Edmonton, Alberta

Company Founded: 1986

No. of Employees: 200 full-time

Branch Offices: Calgary, Alberta
Saskatoon, Saskatchewan
Regina, Saskatchewan

Biotechnical activities since: 1992

Nature of business activities:

- Canada's largest information and communications technology (ICT) research consortium
- Creates innovative technologies and trains students to enhance ICT expertise and improve Canada's global competitiveness
- Research activities focus on five strategic areas: data networking, network access, network systems, photonics, and wireless communications
- 56 partner sponsors represent a unique synergy of industry, government, and university

Core technologies and expertise:

- Data compression, visualization (data), mobile agents (intelligent search tools), transmission networks for data, mobile sensors, data mining

Specialized facilities/equipment:

- TRLabs has five well-equipped, modern ICT research facilities in five research thrusts: network access, data networking, network systems, photonics, and wireless communications
- These facilities include a Wireless (Bluetooth, 802.11, CDMA (wide area network)) Test Bed that will be established in Calgary, Alberta, May 2002

Important patents/licenses:

- TRLabs has 132 patents approved or pending in its five research thrusts, several of which have applicability in the application of ICT to the health care industry and biotechnology

Current strategic partnerships or alliances

- TRLabs has collaborative research agreements with the St. Boniface General Hospital Research Centre (teleradiology) in Winnipeg, Manitoba, the Manitoba Institute of Child Health (telerobotics) in Winnipeg, Manitoba, and Saskatoon District Health in Saskatoon, Saskatchewan
- TRLabs university sponsors include the Universities of Alberta, Calgary, Saskatchewan, Regina and Manitoba
- TRLabs also has industry sponsors who include: telecom carriers, multinational equipment manufacturers, telecommunications service providers, and emerging western Canadian ICT businesses

Partnering/collaborations sought or offered:

- TRLabs welcomes consideration of new partnerships involving the application of ICT technology to the health care and biotechnology fields; TRLabs is able to provide support, people, skills and facilities to further ICT opportunities in these fields

companies

research institutions

Public Contact: May Li
Address: 631 Drake Centre – 181 Freedman Crescent, Winnipeg, Manitoba Canada R3T 5V4
Telephone: (204) 474-6200
Fax: (204) 261-3475
E-mail: uilo@umanitoba.ca
Web site: http://www.uilo.com

Parent Company: University of Manitoba
Company Founded: 1996
President: Alan Simms
E-mail: alan_simms@umanitoba.ca
No. of Employees: 9 full-time

Nature of business activities:

- Facilitator of commercialization of university-based research, while developing and maintaining partnerships between the university community and industry
- UILO works closely with researchers in addressing the university's research and technology commercialization strategy, as well as: advising on intellectual property issues, evaluation and assessment of commercialization opportunities, negotiation of licensing transactions and start-up company program for commercialization of technology, and royalty/spin-off equity management and administration
- UILO is also responsible for negotiating research contracts with industrial sponsorship and/or intellectual property terms as well as material transfer agreements and confidentiality agreements

Core technologies and expertise:

- UILO is comprised of technology development managers who combine business, legal, scientific and administrative expertise to manage a portfolio of inventions in all technical areas and the contractual relationships with individual companies and industry associations

Public Contact: Domenic LoParco
Address: 147 Hamelin Street, Winnipeg, Manitoba, Canada R3T 3Z1
Telephone: (204) 478-1023
Fax: (204) 452-7721
E-mail: Dloparco@viventia.com
Web site: http://www.viventia.com

Parent Company: Same

Company Founded: 1984

No. of Employees: 60 full-time

Biotechnical activities since: 1991

Nature of business activities:

- Develop innovative therapeutics based upon the human immune response to cancer
- Through our Hybridomics™ discovery platform and Immunomine™ screening technology, we are focused on developing "Totally Human" monoclonal antibodies either as targeted therapeutics, Armed Antibodies™, or as direct treatments to fight multiple forms of cancer

Core technologies and expertise:

- Hybridomics™
- Immunomine™
- Armed Antibodies™
- Clinical Manufacturing

Specialized facilities/equipment:

- Research
- Product and Process development
- CGMP
- Clinical manufacturing using mammalian and microbial expression systems

Important patents/licenses:

- Patent on Antibodies

Partnering/collaboration sought or offered:

- Yes

companies
research institutions

Research Institution Profiles

companies
research institutions

Public Contact: Dr. Andrew J. Halayko
Address: P014, Pathology Building, 770 Bannatyne Ave., Winnipeg, Manitoba, Canada R3E 0W3
Telephone: (204) 787-2062
Fax: (204) 787-1220
E-mail: ahalayk@cc.umanitoba.ca
Web site: http://www.scrc.umanitoba.ca/Physiology/asthmacopd

Parent Company: Asthma/COPD Research Centre

Company Founded: 1999

No. of Employees: 7 full-time

Biotechnical activities since: 1999

Nature of business activities:

- Biomedical research- asthma and chronic obstructive pulmonary disease (COPD)
- Preparation of pulmonary fibroblast and smooth muscle cell lines from human and animal sources
- Identifying biochemical mechanisms for altered cell function and foster development of potential new therapeutic targets

Core technologies and expertise:

- Mechanical strain devices- in vitro cell systems
- Microscopic imaging of cells and tissue
- Tissue cultures; establishing cell lines from mammalian lungs (including human)
- Protein expression and analyses
- Preparation and application of "artificial" genes to assess cell function

Specialized facilities/equipment:

- Oval laser scanning microscope
- Fluorescent digital microscope imaging (live cell/tissue)
- Cell culture (preparation and storage)
- Luminometer
- Mechanical strain device for in vitro cell systems

Current strategic partnerships or alliances:

- Manitoba Institute for Child Health (Children's Hospital Foundation), Wyeth Research (Cambridge, MA, U.S.)

Partnering/collaboration sought or offered:

- Offered: pharmaceutical industry
- Investigation of mechanisms of action of drugs for asthma and COPD on airway smooth muscle function

Address: 4140 Buller Building,
Department of Microbiology
University of Manitoba
Winnipeg, Manitoba
Canada R3T 2N2
Telephone: (204) 474-8320
Fax: (204) 474-7603

Parent Company: University of Manitoba

Director: Dr. Ivan Oresnik

E-mail: oresniki@cc.umanitoba.ca

Core technologies and expertise:

- Microbial genetics and molecular biology

Specialized facilities/equipment:

- FPLC

companies

research institutions

Public Contact: Brenda Eamer
Address: P.O. Box 1000A, RR#3
Brandon, Manitoba
Canada R7A 5Y3
Telephone: (204) 726-7650
Fax: (204) 728-3858

Parent Company: Agriculture and Agri-Food Canada

Director: Dr. Reg Kucey

E-mail: rkucey@em.agr.ca

No. of Employees: 100 fulltime

Nature of business activities:

- Agronomy research
- Manure management
- Barley breeding
- Beef production research

Core technologies and expertise:

- 19 Research scientists in various disciplines

Specialized facilities/equipment:

- Greenhouses
- Growth cabinets
- Double haploid/tissue culture lab for plants
- Field sites
- Radiotracer laboratory
- Pastures and corrals for handling cattle

Current strategic partnerships/alliances:

- Over 60 collaborative projects underway

Partnering/collaboration sought or offered:

- Research in environmental health, food safety, and sustainable production

Public Contact: Kathi Neal
Address: 675 McDermot Ave.
Winnipeg, Manitoba
Canada R3E 0V9
Telephone: (204) 787-4540
Fax: (204) 786-0183
E-mail: Kathi.neal@cancercare.mb.ca
Web site: http://www.cancercare.mb.ca

Parent Company: Same

Company Founded: 1957

President & CEO: Dr. Brent Schacter

No. of Employees: 483

Branch Offices: Four sites in Winnipeg, Manitoba
Community Cancer Programs
Network (14 centres across the province)

Biotechnical activities since: Division of Medical Physics since 1950
Clinical Investigations Department since 1972

Nature of business activities:

- Cancer prevention, detection, care, research and education throughout Manitoba
- Radiation Protection consultations and measurement services for ionizing and non-ionizing radiation. The consultations include those required to support licensing applications to the Canadian Nuclear Safety Commission for the purchase and use of radioactive material. Technical services include the use of measuring equipment for the detection and quantification of radiation, the calibration of ionizing radiation survey meters, wipe testing and wipe test analysis.
- Radiation Protection training including customized course preparation and delivery
- Design and implementation of radiation protection program
- The Clinical Investigations Office provides the infrastructure for most of the clinical research conducted at CancerCare Manitoba.
- Medical Devices: design, prototype and manufacture of medical related devices and equipment. Design and manufacture of custom clinical and physics testing equipment not commercially available for health care facilities.

Core technologies and expertise:

- Services in radiation therapy, chemotherapy, screening programs, provincial cancer registry, epidemiology, nursing and social services.
- Pediatric, medical, surgical, neurological, urological, bone marrow transplantation/acute leukemia and psychiatric multidisciplinary oncology clinics.
- Large Medical Physics Department with technological and research development capabilities, primarily in the development of new brachytherapy imaging methodology.
- Clinical Investigation Office conducts clinical trials with NSABP, NCIC-CTG, COG, RTOG as well as many private industry funded initiatives.
- Radiation Protection: Radiation measurements, radiation meter calibrations, consultations re licensing and the design and operation of radiation protection programs. Competent in the preparation of licence applications to the Canadian Nuclear Safety Commission. Radiation safety course preparation and delivery, radiation protection program design and implementation. Also has shielding design expertise for ionizing irradiation facilities.
- Medical Devices: design, machining, welding, and light fabrication.

Specialized facilities/equipment:

- Radiation measuring equipment for all energies of the electromagnetic spectrum • Ionizing radiation measuring equipment for x-rays, gamma radiation, alpha, beta and neutron radiation • Multi-channel analysis capability for Isotope identification • Medical Devices: modern machine shop with CNC milling equipment and CAD/CAM design capabilities

Certifications:

- Certified (by Canadian Nuclear Safety Commission) as a radiation meter calibration facility
- Certified (by Canadian Nuclear Safety Commission) to perform wipe tests and analyze wipe tests for radioactive sources, as required by Canadian Nuclear Safety Commission
- Staff- Journeyman machinists, Journeyman Tool and Die

Current strategic partnerships/alliances:

- University of Manitoba • CancerCare Manitoba Foundation • Manitoba Health
- Province of Manitoba • Misercordia Hospital • St. Boniface Hospital • Victoria Hospital

Partnering/collaboration sought or offered:

- Opportunities exist for collaboration with clinical investigators on the treatment of cancer and the assessment of newer drugs. Studies related to nonmalignant hematologic disorders. Research studies involving cancer prevention, symptom control, causes of cancer, long term effects of cancer treatment and biology of cancer cells.

Cereal Research Centre

Public Contact: Darren Ramlal
Address: 195 Dafoe Road, Winnipeg, Manitoba, Canada R3T 2M9
Telephone: (204) 983-5533
Fax: (204) 984-6333
E-mail: dramlal@em.agr.ca
Web site: http://www.agr.gc.ca/science/winnipeg

Parent Company: Agriculture and Agri-Food Canada

Director: Dr. Jim Bole

E-mail: jbole@em.agr.ca

No. of Employees: 250 full-time

Nature of business activities:

- Agricultural Research: plant breeding and biotechnology

Core technologies and expertise:

- New cereal and ornamental varieties, genetic marker development, bio-control products, novel products from barley, matrix attachment regions, insect control methods, new methods for quality testing and genomic research for fusarium head blight and leaf rust resistance
- Expertise in molecular breeding, molecular mapping, gene cloning, molecular pathology, proteomics, transformation functional and structural genomics, gene expression analysis

Specialized facilities/equipment:

- Tissue culture cabinets and laboratories; sequencing lab with automated sequences; proteomics lab; robotics for arraying, colony picking, liquid handling; microarray scanners

Partnering/collaboration sought or offered:

- Sought: Collaborative research partners, licensees for technologies and varieties
- Offered: Varieties in wheat, oats, peas, flax and ornamental plants; DNA markers linked to selected characteristics; molecular mapping, gene cloning, functional genomics

Public Contact: Dr. Barbara Triggs-Raine
Address: 324 Basic Medical Services Bldg, 730 William Avenue (Mail)- 770 Bannatyne Avenue, Dept. Biochemistry and Medical Genetics, Winnipeg, Manitoba Canada R3E 0W3
Telephone: (204) 789-3218
Fax: (204) 789-3900
E-mail: traine@ms.umanitoba.ca
Web site: Not available at this time

Parent Company: University of Manitoba

Company Founded: 2001

No. of Employees: 3 full-time
64 (affiliated laboratories and investigators)

Biotechnical activities since: 2001

Nature of business activities:
- Identification and characterization of the basis of genetic diseases; with emphasis on the development of diagnostic and new therapeutic products

Core technologies and expertise:
- Genetic epidemiology, linkage analysis, genomic analysis, bioinformatics, mutation detection

Specialized facilities/equipment:
- Equipment for all aspects of DNA analysis
- Equipment for all aspects of protein analysis

Important patents/licenses:
- None at this time

Current strategic partnerships/alliances:
- Manitoba Institute for Child Health
- Canadian Genetic Diseases Network

Partnering/collaboration sought or offered:
- Identification of disease genes in families

Public Contact: Harry Schulz
Address: R4046-351 Tache Avenue
Winnipeg, Manitoba
Canada R2H 2A6
Telephone: (204) 235-3939 or (204) 235-3938
Fax: (204) 237-4092
E-mail: dnnd@sbrc.ca
Web site: http://www.sbrc.ca\dnnd

Parent Company: St. Boniface General Hospital Research Centre

Company Founded: 2001

President: Dr. Jonathan Geiger

E-mail: geiger@cc.umanitoba.ca

No. of Employees: 35 full-time

Biotechnical activities since: 2000

Nature of business activities:

- Biotechnology research

Core technologies and expertise:

- Neurodegenerative disorders including: Alzheimer's disease, ischemic and hemorrhagic stroke, HIU-1 dementia, Multiple Sclerosis, traumatic brain injury and aging-related sleep studies

Specialized facilities/equipment:

- HPLC, calcium imaging system, fluorescent microscopy, confocal microscope, micro array analysis, bioinformatic analysis, proteomics

Current strategic partnerships/alliances:

- University of Manitoba, St. Boniface Research Foundation, National Institutes of Health, Manitoba Health Research Foundation, Canadian Institutes of Health Research, Alzheimer's Society of Canada, Canadian Foundation for Innovation, Western Life Sciences, AstraZeneca, PerkinElmer, University of Pennsylvania, University of Kentucky, University of Toronto

Public Contact: Dr. Digvir Jayas
Address: 205 Administration Bldg., University of Manitoba, Winnipeg, Manitoba Canada R3T 5V6
Telephone: (204) 474-6860
Fax: (204) 474-7568
E-mail: digvir_jayas@umanitoba.ca

Parent Company: University of Manitoba

Company Founded: 2002

No. of Employees: 15 full-time

Nature of business activities:

- Product development, analytical services, safety assessment of products
- Clinical trials, product enhancement
- Extraction of bioactives, processing of bioactives

Public Contact: Theodore I. Kuschak
Address: ON6038 675 McDermot Avenue
Winnipeg, Manitoba
Canada R3A 0C8
Telephone: (204) 787-4146
Fax: (204) 787-2190
E-mail: kuschakt@cc.umanitoba.ca
Web site: http://www.umanitoba.ca/institutes/manitoba_institute_cell_biology/GCCRD/Index3.htm

Parent Company: University of Manitoba, CancerCare Manitoba, Manitoba Institute of Cell Biology

Company Founded: 1999

President: Dr. Jim Davie

E-mail: davie@cc.umanitoba.ca

No. of Employees: 3 full-time

Branch Offices: None

Biotechnical activities since: 1999

Nature of business activities:

- Cytogenetic Microscopy: Bright field and fluorescent imaging to support basic and translational research in cancer research as well as other genetic diseases
- Microscopic and software development for the early detection and screening of genetic diseases

Core technologies and expertise:

- Cytogenetic Microscopy: Fluorescent In Situ Hybridization (FISH, mRNA FISH, Spectral FISH), Spectral Karyotyping (SKY), G-banding, Comparative Genomic Hybridization (CGH), quantitative immunohistochemical staining and analysis, histopathology, laser chromosome microdissection.
- Support human samples as well as mouse models and other species

Specialized facilities/equipment:

- Nine networked computer driven Zeiss fluorescent microscopes and additional analysis stations
- The microscopes support imaging and analysis applications for the technologies described above

Important patents/licenses:

- Applied Spectral Imaging Inc. (Israel/USA), Manitoba Institute of Cell Biology, and the University of Manitoba – Spectral FISH as a rapid early detection technology
- MetaSystems Group Inc. (Germany/USA), Manitoba Institute of Cell Biology, and the University of Manitoba – Mouse Karyotype classifier

Current strategic partnerships/alliances:

- **Industrial Funding Partners:** Carl Zeiss Canada Ltd., Applied Spectral Imaging Inc., MetaSystems Group Inc., Photonic Instruments Inc., Empix Imaging Inc.
- **Industrial Research Partners:** Sarstedt Inc., Cedarlane Laboratories Inc., Invitrogen Canada Inc., Kindler GmbH & Co., VWR Canlab Scientific Research Partners, National Institutes of Health/National Cancer Institute (USA), Karolinska Institute (Sweden), Kanizawa University (Japan), University of Chiang Mai (Thailand), European Lymphoma Group, Cross Cancer Institute/University of Alberta
- **Trading Partners:** Department of Biochemistry and Medical Genetics/University of Manitoba, Fort Garry School Division No.5/Winnipeg, Canadian Assoc. of Women in Science, Gymnasium Kreuzgasse (Germany) Part of a $1.8 million, 6 year training initiative for Canadian and exchange students, post-doctoral, medical, high school and technical trainees sponsored by Canadian Institute of Health Research over the course of 6 years.

Public Contact: Dr. Robert Murray
Address: MS7-820 Sherbrook Street Winnipeg, Manitoba
Canada R3A 1R9
Telephone: (204) 787-2022
Fax: (204) 787-4547
E-mail: rmurray@hsc.mb.ca

Parent Company: Same

Company Founded: 1981

No. of Employees: 7 Research departments
200 Researchers

Biotechnical activities since: 1981

Nature of business activities:

- The Health Sciences Centre Foundation was established in 1981 to improve health care in Manitoba by supporting medical research of the highest quality by investigators affiliated with the Health Sciences Centre (HSC) and the University of Manitoba, and to support the HSC in its efforts to achieve clinical excellence
- Since 1981, the foundation has invested over $16 million dollars in support of more than 175 leading-edge researchers and health care investigators

Core technologies and expertise:

- World-class research has contributed to new knowledge in many areas including cardiovascular disease, spinal cord injury, respiratory diseases, organ transplantation, disorders of reproduction and pregnancy, diabetes and endocrine disorders, digestive diseases, renal failure, cancer, allergies, and arthritis
- The achievements of our researchers have been a key element in the growth of Manitoba's reputation as a major centre for biomedical research

Public Contact: Valerie McPherson
Address: 435 Ellice Avenue, Winnipeg, Manitoba, Canada R3B 1Y6
Telephone: (204) 983-7526
Fax: (204) 984-4722
E-mail: research@ibd.nrc.ca
Web site: http://www.IBD.NRC.ca

Parent Company: Same

Company Founded: 1992

Director: Dr. Ian Smith

E-mail: Ian.Smith@NRC.ca

No. of Employees: 150 full-time

Branch Offices: Ottawa, Ontario
Calgary, Alberta
Halifax, Nova Scotia

Biotechnical activities since: 1992

Nature of business activities:

- Magnetic resonance imaging and spectroscopy
- Infrared spectroscopy and imaging
- Fluorescence and thermal imaging
- Advanced medical software

Core technologies and expertise:

- Electronics, Informatics, Physiology

Specialized facilities/equipment:

- MRI, Infrared, Fluorescence spectrometers, Advanced computation, Silicon Graphics

Certifications:

- Health Canada, FDA, CE MARK, ISO

Important patents/licenses:

- 28 patents approved or pending

Current strategic partnerships/alliances:

- Foothills Hospital – Calgary, Alberta
- St. Joseph's Hospital – London, England
- QE II Hospital – Halifax, Nova Scotia
- Institute for Medical Resonance Research – Sydney, Australia
- Health Sciences Centre – Winnipeg, Manitoba
- St. Boniface General Hospital – Winnipeg, Manitoba

Partnering/collaboration sought or offered:

- Medical diagnostic devices and procedures
- Medical diagnostic software

Address: St. Boniface General Hospital
Research Centre
Institute of Cardiovascular Sciences
351 Tache Avenue, Winnipeg,
Manitoba, Canada R2H 2A6
Telephone: (204) 235-3417 or 235-3421
Fax: (204) 233-6723

Company Founded: 1987

Director: Dr. Naranjan Dhalla

No. of Employees: 80 full-time
25 part-time

Biotechnical activities since: 1987

Nature of business activities:
- Cardiovascular Research

Core technologies and expertise:
- Drug discovery for the treatment of heart failure, ischemic heart disease, and diabetes

Specialized facilities/equipment:
- Equipment for hemodynamic, biochemical, and molecular biology studies

Important patents/licenses:
- Current strategic partnerships or alliances
- Medicure Inc.

Partnering/collaboration sought or offered:
- Industries interested in the development of cardiovascular drugs

Public Contact: Dr. Patrick Choy
Address: 309-753 McDermot Avenue
Winnipeg, Manitoba
Canada R3E 0W3
Telephone: (204) 789-3375
Fax: (204) 789-3942
E-mail: pchoy@ms.umanitoba.ca
Web site: http://www.umanitoba.ca/academic/faculties/medicine/units/atherosclerosis

Parent Company: University of Manitoba

Company Founded: 1992

Director: Dr. David Mymin

No. of Employees: 20 full-time

Nature of business activities:

- Research in lipids and lipoproteins pertaining to human disease

Core technologies and expertise:

- Cutting edge techniques in the determination of various lipoproteins in plasma of hyperlipidemic patients

Specialized facilities/equipment:

- GLC
- HPLC
- Ultracentrifugation
- Other molecular biology techniques

Current strategic partnerships/alliances:

- University of Manitoba UILO – Venture Box

Partnering/collaboration sought or offered:

- To start up "First Choice Health Products"

Public Contact: Dr. Geoff Hicks
Address: ON5029, 675 McDermot Avenue
Winnipeg, Manitoba
Canada R3E 0V9
Telephone: (204) 787-2133
Fax: (204) 787-2190
E-mail: hicksgg@cc.umanitoba.ca
Web site: http://www.escells.ca

Company Founded: 1999

No. of Employees: 5 full-time

Nature of business activities:

- Large-scale development of a library of mouse embryonic stem cells (each with a defined mutation in an exposed cellular gene)
- ES cells can be used to derive transgenic "knock-out" mice for the given target gene

Core technologies and expertise:

- Functional genomics
- Mouse models of human disease
- Embryonic stem cells
- Transgenic technologies
- Bioinformatics

Specialized facilities/equipment:

- High throughput genomics
- Transgenic injection units
- ES cell repository

Current strategic partnerships/alliances:

- Canadian Institute of Health Research
- Canadian Genetic Diseases Network
- NCBI (USA)
- International Mouse Metagenesis Consortium

Public Contact: Dr. John Brewster
Address: Institute of Industrial Mathematical Science, University of Manitoba
Winnipeg, Manitoba
Canada R3T 2N2
Telephone: (204) 474-6724
Fax: (204) 474-7602
E-mail: john_brewster@umanitoba.ca
Web site: http://www.umanitoba.ca/institutes/iims

Parent Company: University of Manitoba

Company Founded: 2002

Director: Dr. Brian Fristensky

E-mail: frist@cc.umanitoba.ca

Biotechnical activities since: 2002

Nature of business activities:

- Bioinformatics consulting
- Software development
- Analysis of genomic data

Core technologies and expertise:

- Computational biology
- Molecular sequence analysis
- Biological database management
- Statistical analysis and experimental design

Specialized facilities/equipment:

- Sun/Unix server platform; large installed base of software for bioinformatics, statistics, and database management

Current strategic partnerships/alliances:

- Genome Prairie Bioinformatics

Partnering/collaboration sought or offered:

- Industrial, government, and academic research

Public Contact: Carolyn DeCoster
Address: Room 408-727
McDermot Avenue
Dept. of Community Health
Sciences, Faculty of Medicine,
University of Manitoba
Winnipeg, Manitoba
Canada R3E 3P5
Telephone: (204) 789-3819
Fax: (204) 789-3910
Web site: http://www.umanitoba.ca/centres/mchp/

Parent Company: University of Manitoba

Company Founded: 1991

President: Dr. Noralou Roos

E-mail: noralou_ross@cpe.umanitoba.ca

No. of Employees: 60 full-time

Nature of business activities:

- Research on the health of Manitobans
- Examine patterns of illness in the population
- Study how people use health care services and develop an understanding of the broader determinants of health, i.e. income, education, employment and social circumstance

Core technologies and expertise:

- MCHP has developed a Population Health Information System (POPULIS) that relates the health of the population to its use of health care services- hospitals, doctors, nursing homes, prescription drugs and economic and social factors
- Analysis can be provided at different geographic levels – Regional Health Authorities, municipalities or hospital service areas

Specialized facilities/equipment:

- State-of-the-art high security data research laboratory
- The Population Health Research Data Repository, a comprehensive database, developed to describe and explain patterns of care and profiles of health and illness
- The database contains anonymized files from the Ministry of Health as well as data from other agencies
- Subsets of data are used in specific approved research projects

Current strategic partnerships/alliances:

- Manitoba Health, Regional Health Authorities, Dept. of Education, Dept. of Family Services

Manitoba Centre for Proteomics

Public Contact: Dr. John Wilkins
Address: 805, JBRC, 715 McDermot Ave.
Winnipeg, Manitoba, Canada
R3E 3P4
Telephone: (204) 789-3835
Fax: (204) 789-3987
E-mail: jwilkin@cc.umanitoba.ca

Parent Company: University of Manitoba

Company Founded: 1980

No. of Employees: 10 full-time

Biotechnical activities since: 1980

Nature of business activities:

- Analysis of human inflammatory diseases using proteomic approaches
- Biomarker identification
- Development of software and instrumentation for analysis in above systems

Core technologies and expertise:

- Cell culture, Protein interactions, Proteomics, Monoclonal Antibodies, Immunochemistry, Immunoprecipitation, Integrin Purification and Functional Assessment, Animal models of transplantation

Specialized facilities/equipment:

- Hybridoma generation and growth, mass spectrometers, Linear TOF (Ciphergen SELDI), Orthogonal QqTOF (PESCIEX) with electrospray, MALDI and nanospray services
- ULc system for online data acquisition
- Biacore 2000 surface plasma resonance spectrometer, laser capture microscopy

Current strategic partnerships/alliances:

- Applied Biosystems
- Ciphergen Biosystems Inc.
- Chemicon Intl.Corp.

Partnering/collaboration sought or offered:

- Tissue analysis (immunochemistry, histochemistry)
- Sample analysis mass spectroscopy (ms or ms/ms)
- Protein ID bioinformatics
- Beta site for proteomic instrumentation or new reagents/systems

Address: 5008-675 McDermot Avenue
Winnipeg, Manitoba
Canada R3E 0V9
Telephone: (204) 787-2391
Fax: (204) 787-2190
Web site: http://www.umanitoba.ca/institutes/manitoba_institute_cell_biology/index.html

Parent Company: Jointly affiliated with the University of Manitoba and CancerCare Manitoba

Company Founded: 1969

Director: Dr. Jim Davie
E-mail: davie@cc.umanitoba.ca

No. of Employees: 110

Nature of business activities:

- Basic and translational research in biology and its relation to health (emphasis on cancer and related diseases) • Study of molecular origins of cancer • Study the role of signal transduction pathways in regulating cell proliferation • Study of cell death • Study of gene expression and platelet function • Study of development of markers of risk of developing invasive breast cancer • Study of neuronal growth and differentiation during development • Study of programmed cell death • Study of biochemical action of cancer chemotherapeutics

Core technologies and expertise:

- Staff trained in: biochemical, molecular biology, recombinant DNA, advanced cytogenetic, genetic, protein and microscopic techniques
- Expertise in: cancer biology, apoptosis, gene expression, anticancer drugs, development, functional genomics, thrombosis, platelet function, and genomic instability

Specialized facilities/equipment:

- Manitoba Breast Tumor Bank • Genomic Centre for Cancer Research and Diagnosis • Centre for Mammalian Functional Genomics • DNA Sequencing Facility • Manitoba Breast Cancer Research & Diagnosis Centre –operational by 2003

Certifications:

- While not a degree granting institution, we play a major role in training scientists, graduate or postgraduate students, medical trainees, and investigators from around the world

Important patents/licenses:

- Improved Treatment Method for Abnormal cells • Identification of Compounds which Increase the Therapeutic Index of Chemotherapy Drugs • Method of Treatment of Hormone – Unresponsive Metastatic Prostate Cancer • Methods and Markers for Detection and Treatment of Premalignancy • Proteins and Methods for Inducing Apoptosis • Proteins and Methods to Induce or Inhibit Necrosis in Various Tissues • CD36 synthetic peptide: file held jointly with the University of British Columbia, who is taking the lead on patent prosecution and commercialization • Novel hyaluronan receptor that mediates tumor cell motility (two patent files related to mouse sequences, and the third relates to the human sequence)

Current strategic partnerships/alliances:

- MetaSystems Group Inc., Applied Spectral Imaging Inc., Applied Imaging, University of Besancon – France, German Cancer Research Centre – Heidelberg, Karolinska Institute – Sweden, National Institute of Health – Maryland, USA, Canadian Disease Network, Genome Ontario, University of Calgary

Partnering/collaboration sought or offered:

- Available through our principle investigators and centres

companies

research institutions

Address: 513 - 715 McDermot Avenue
John Buhler Research Centre
Winnipeg, Manitoba
Canada R3E 3P4
Telephone: (204) 789-3750
Fax: (204) 789-3915
E-mail: info@mich.ca
Web site: http://www.mich.ca

Parent Company: The Children's Hospital Foundation of Manitoba Inc.

Company Founded: 2001

Director: Ray Hoemsen

E-mail: Rayhoemsen@mich.ca

No. of Employees: 101 full-time

Biotechnical activities since: 1995

Nature of business activities:

- Dedicated to excellence in pediatric research, from bench to the bedside
- 60,000 sq. ft. of research and clinical space available for over 100 research and support personnel to carry out $4,000,000 of research and clinical trial activity

Core technologies and expertise:

- Developmental pharmacology
- Nutrition and metabolism
- Allergy laboratory
- Centre for Health Evidence
- Endocrinology
- IMPACT
- Infectious diseases
- Nephrology laboratory
- Pulmonary cell biology
- Respirology
- Biology of breathing (respirology, allergy and clinical immunology, and neonatology)
- Genetics
- Allergy/clinical immunology
- Autism
- Developmental neuropathology
- HPLC laboratory
- Infant nutrition
- LiNK'd
- Neurobiology
- Pulmonary cell biology (asthma)
- Telehealth
- Manitoba Institute for Child Health Pediatric identification

Specialized capabilities:

- Clinical trials
- Experimental pathology
- Toxicology
- Health information system research (including PHIA compliance)
- Epidemiologic studies
- Experimental pharmacology
- Image analysis and morphometry
- Molecular biology

Specialized facilities/equipment:

- Acoustic research facility
- DEXA scanner
- Information systems network
- Analytical Chemistry (GS-MS-MS, HPLC, HPLC-MS, NMR)
- Cellular Bio-Mechanics
- Digital microscopy
- Telehealth

Certifications:

- PHIA

Current strategic partnerships/alliances:

- Prairie Centre for Business Intelligence
- TRLabs
- University of Manitoba

Partnering/collaboration sought or offered:

- Clinical trials
- Contract research

Morden Research Centre

Public Contact: Dr. Campbell Davidson
Address: First Street, 100-101-Route 100
Morden, Manitoba
Canada R6M 1Y5
Telephone: (204) 822-7207
Fax: (204) 822-4471
E-mail: cdavidson@em.agr.ca
Web site: http://www.res2.agr.ca/winnipeg/welcome.htm

Parent Company: Agriculture and Agri-Food Canada

Company Founded: 1915

Biotechnical activities since: 1980

Nature of business activities:
- Research and Development
- Agriculture
- Crops
- Plant breeding
- Plant pathology

Core technologies and expertise:
- Plant breeding
- Plant pathology

Specialized facilities/equipment:
- PCR laboratory
- Level 3-biocontainment facility
- Crop quality lab

Important patents/licenses:
- Licenses of new varieties of crops

Current strategic partnerships/alliances:
- Agribusiness

Partnering/collaboration sought or offered:
- Agriculture related, pulse crops, flax, and ornamental landscape plants

National Centre for Agri-Food Research in Medicine

Address: St. Boniface General Hospital
Research Center, 351 Tache Avenue
Winnipeg, Manitoba
Canada R2H 2A6
Telephone: (204) 235-3414
Fax: (204) 231-1151
Web site: http://www.sbrc.ca/NCAFFrameset.htm

Parent Company: St. Boniface General Hospital Research Centre

Director: Dr. Grant Pierce

E-mail: gpierce@sbrc.ca

Biotechnical activities since: 1999

Nature of business activities:

- Examine health-related benefits of natural health products (nutraceuticals and functional foods)

Core technologies and expertise:

- Basic science biomedical research
- Clinical trials
- Analysis of active ingredients

Specialized facilities/equipment:

- State of the art medical research facility
- State of the art equipment (HPLC, GC, mass spectrometry, confocal microscopy, molecular biology, cell culture, and histology)

Important patents/licenses:

- Patents pending

Current strategic partnerships/alliances:

- Partnered with numerous companies to test their products under clinical trials or in basic science experimentation

Partnering/collaboration sought or offered:

- Collaborations are sought with any company, institution, or investigator with interests in our capabilities

National Microbiology Laboratory

Address: Canadian Science Centre for Human and Animal Health
1015 Arlington Street, Winnipeg, Manitoba, Canada R2E 3R2
Telephone: (204) 789-2000
Fax: (204) 789-2097
E-mail: dorothea_blandford@hc-sc.gc.ca
Web site: www.nml.ca

Parent Company: Health Canada

Director: Dr. Dorothea Blandford

E-mail: dorothea_blandford@hc-sc.gc.ca

No. of Employees: 165 full-time

Branch Offices: Population and Public Health Branch

Biotechnical activities since: 1999

Nature of business activities:

Reference Diagnostics

Surveillance

Research and development

Education and Training – Infectious diseases and biosafety

Core tecchnologies and expertise:

- DNA Microarray
- Disease Surveillance
- PulseNet Canada
- TSE/Alzheimer's Biorepository

Specialized facilities/equipment:

- Levels 2, 3, and 4 biocontainment laboratories
- Electron microscopy
- Level 3 insectory

Current strategic partnerships/alliances:

- Global Health Security Network
- University of Maniotba
- Province of Manitoba (Health)
- Winnipeg Regional Health Authority
- Cangene Corporation
- Cadham Provincial Laboratory
- Universities of British Columbia, Saskatchewan, Toronto, Nairobi, Oxford, Ghent & Washington
- CIDA
- United Nations
- IAVA
- WHO
- World Bank
- CIHR
- Pan European Health Organization

Spinal Cord Research Centre

Public Contact: Nancy Eidsvig
Address: 730 William Avenue, Winnipeg, Manitoba, Canada R3E 3J7
Telephone: (204) 789-3761
Fax: (204) 789-3930
E-mail: info@scrc.umanitoba.ca
Web site: http://www.scrc.umanitoba.ca

Parent Company: University of Manitoba

Company Founded: 1987

Director: Dr. David McCrea

E-mail: dave@scrc.umanitoba.ca

No. of Employees: 48 full-time

Branch Offices: Department of Physiology

Nature of business activities:

- Conduct research into the mechanisms controlling the major functional systems in the brain and spinal cord, and to develop this knowledge to provide new clinical tools for the treatment of injury and disease affecting these functional systems. In particular, the SCRC is an environment for world-class spinal cord research

Core technologies and expertise:

- Spinal cord electrophysiology and neuropharmacology investigating into the control of movement, bladder function and sexual function
- Development of devices and pharmaceutical agents for treatment of neurological injury

Important patents/licenses:

- Several members of the SCRC have been successful in the development of intellectual property (Drs. Cheng, Nagy, D Nance), software (Drs. Jordan, Kriellaars) and devices for rehabilitation (Drs. Kriellaars, P Nance)

Current strategic partnerships/alliances:

- Universities of Glasgow, Goteborg (Sweden), Alberta, Dalhousie, Miami, North Carolina
- Panum Institute (Denmark), CINVESTAV (Mexico)

St. Boniface General Hospital Research Centre

Address: 351 Tache Avenue
Winnipeg, Manitoba
Canada R2H 2A6
Telephone: (204) 235-3206
Fax: (204) 235-0793
Web site: http://www.sbrc.ca

Parent Company: St. Boniface General Hospital

Company Founded: 1986

Director: Harry Schulz

E-mail: Hschulz@sbrc.ca

No. of Employees: 225 full-time

Biotechnical activities since: 1986

Nature of business activities:

- Medical Research

Core technologies and expertise:

- Cardiovascular, advanced medical imaging, and degenerative disorders associated with aging (such as Alzheimer's and stroke)
- Infectious diseases/microbiology, nephrology, surgical research, pharmaceuticals, nursing research, sleep related breathing disorders, anesthesia, teleradiology and family medicine

Specialized facilities/equipment:

- Specialized MRI research facilities (1.5 Tesla Siemens; 3 Tesla IMRIS functional MRI and a .2 Tesla interventional)
- Small scale pharmaceutics production facility
- Advanced surgical research theatres

University of Manitoba – Faculty of Agriculture and Food Science

Address: 205 Ellis Building
13 Freedman Crescent, Winnipeg,
Manitoba, Canada R3T 2N2
Telephone: (204) 474-9621
Fax: (204) 474-7630
E-mail: foodcas@ms.umanitoba.ca
Web site: http://www.umanitoba.ca/afs/food_science/

Parent Company: University of Manitoba

Department Head: Dr. Richard Holley

No. of Employees: 24

Biotechnical activities since: 1966

Nature of business activities:

- Education, QA program, HACCP, Research and development, Value added processing, Shelf life extension of perishable foods, Industry service work possible in all areas of our expertise

Core technologies and expertise:

- Cereal, protein, carbohydrate chemistry
- Food microbiology
- Food safety
- Active packaging films
- Research and development
- Dairy and horticulture crop processing
- Ingredient functionality in foods
- Natural health product extraction stability potency

Specialized facilities/equipment:

- Food pilot plant
- Dairy pilot plant
- Library
- Size reduction equipment
- Pasteurization (HTST)
- Cooking and frying
- Vacuum evaporation
- Fluidized bed dryer, drum dryer
- Texture analysis
- Full microbiology and chemistry laboratories

Certifications:

- Institute of Food Technologists accredited undergraduate (B.Sc. Food Science) Program

Important patents/licenses:

- Dairy plant federal license

Current strategic partnerships/alliances:

- Contract research and grant funded projects with many food companies across Canada

Partnering/collaboration sought or offered:

- Technological assistance offered to industry

Public Contact: Dr. Digvir S. Jayas
Address: Room 205, Administration Building
Winnipeg, Manitoba
Canada R3T 2N2
Telephone: (204) 474-6860
Fax: (204) 474-7568
Toll-free: 1-800-432-1960
E-mail: digvir_jayas@umanitoba.ca
Web site: http://www.umanitoba.ca

Parent Company: University of Manitoba

Nature of business activities:

- Research and development, educational programs, professional development programs, product development

Core technologies and expertise:

- Mass spectrometry, proteomics, bioinformatics, mouse models, genomics, biomarkers, infectious diseases, cardiovascular sciences, cancer, pediatrics, functional foods, nutraceuticals

Specialized facilities/equipment:

- Time-of-flight mass spectrometer, proteomics centre, Manitoba Institute of Cell Biology, Functional Foods and Nutraceuticals Centre

Certifications:

- CFIA, USDA, NIH

Important patents/licenses:

- Over 30 licenses, over 500 patent applications

Current strategic partnerships/alliances:

- Springboard fund with Crocus Investment Fund
- Incubat, University of Manitoba UILO
- Leading one and participating in sixteen of twenty-two National Centres of Excellence

Partnering/collaboration sought or offered:

- Licensing of inventions from University research